



## Jefferson County Avera Road MSWL December 15, 1998

### Introduction

The Georgia Environmental Protection Division (GEPD) asked the Georgia Division of Public Health (GDPH) to conduct a health consultation on the Avera Road MSWL in Louisville, Georgia. GEPD is concerned about possible adverse health effects caused by past, present and future exposures to environmental contamination from the Avera Road Municipal Solid Waste Landfill (MSWL).

### Site Description and History

The Avera Road MSWL is located approximately one mile north of the city of Louisville, Georgia. The landfill is on roughly 27.6 acres of land and is currently operating. There are a number of residences in the surrounding areas. The landfill is scheduled for closure by the end of 1998.

### Environmental Sampling

Sampling of groundwater from monitoring wells started in June 1991 and continued on an annual schedule. The groundwater monitoring network around the landfill consists of eleven wells: three up-gradient and eight down-gradient. Six additional monitoring wells were installed in 1995. Only sporadic occurrences of low level volatile organic compounds (VOCs) were detected during the first four years of sampling. With the addition of new monitoring wells in 1995, high levels of VOCs were detected.

When informed about the landfill related contamination, the Jefferson County Board of Commissioners authorized Moreland Altobelli Associate, Inc. (MAAI) to conduct a survey of the residential water supplies through sampling private wells in the vicinity of the site. Nineteen homes were found to use private well water in the area. In October 1996, all of these wells were sampled and analyzed for possible contaminants. Low levels of cis-1,2-dichloroethene were detected in two of the private wells.

In December 1997, MAAI met with GEPD to discuss the sampling results; the parties agreed that the contaminant plume was much larger than expected.

Four springs are in the vicinity of the landfill, three of

which discharge water from the surficial aquifer. The three springs were sampled and were found to be contaminated.

### Results

Based on groundwater data collected by MAAI, the contamination has migrated off-site. The direction of the groundwater contamination plume is apparently focused radially from the center of the landfill to the south, southwest, and southeast.

The two residences which have private wells that were contaminated with VOCs are adjacent to each other and are about a half-mile northwest and downhill from the landfill. The chemical detected in these wells, cis-1,2-dichloroethene, is a commonly used solvent. The levels shown in the private wells are below the Maximum Contaminant Levels (MCL).

The concentrations of cis-1,2-dichloroethene at the spring heads are below the MCL, but levels of trichloroethene were found above the appropriate MCL. The springs do not appear to be used by humans, and no livestock graze in the area.

The only media which have been contaminated off-site are groundwater and surface water at the spring heads. Contamination is not likely to impact the Louisville municipal water wells or any irrigated wells in the area.

### Conclusions

This site poses **no apparent public health hazard** due to the following: if any past human exposure occurred to contaminated media, the exposure would not have exceeded an ATSD chronic MRL; data are available for all environmental media to which people may have been exposed; and, no community-specific health outcome has been reported to indicate that the site has had an adverse impact on human health.

### Recommendations

- Private wells need to be monitored periodically to assure that off-site groundwater contamination does not impact the water supply of residents in the vicinity of the landfill.
- Residents need to be advised not to use the surface water present at springs in the area for consumption.